Iowa Department of Human Services

Terry E. Branstad
Governor

Kim Reynolds
Lt. Governor

Charles M. Palmer
Director

December 15, 2015

Michael Marshall
Secretary of Senate
State Capitol Building
LOCAL

Carmine Boal
Chief Clerk of the House
State Capitol Building
LOCAL

Dear Ms. Boal and Mr. Marshall:

Enclosed please find copies of the report to the General Assembly relative to the "Iowa Psychiatric Medical Institutes for Children (PMIC) Annual Report".

This report was prepared pursuant to the directive contained in 2011 Iowa Acts, Chapter 12, Section 9.

Please feel free to contact me if you need additional information.

Sincerely,

Paige Thorson
Policy Advisor

PT/av

Enclosure

cc: Terry E. Branstad, Governor

Iowa Department of Human Services

Iowa Psychiatric Medical Institutes for Children (PMIC) Annual Report

December 2015

Annual PMIC Report

I. Introduction

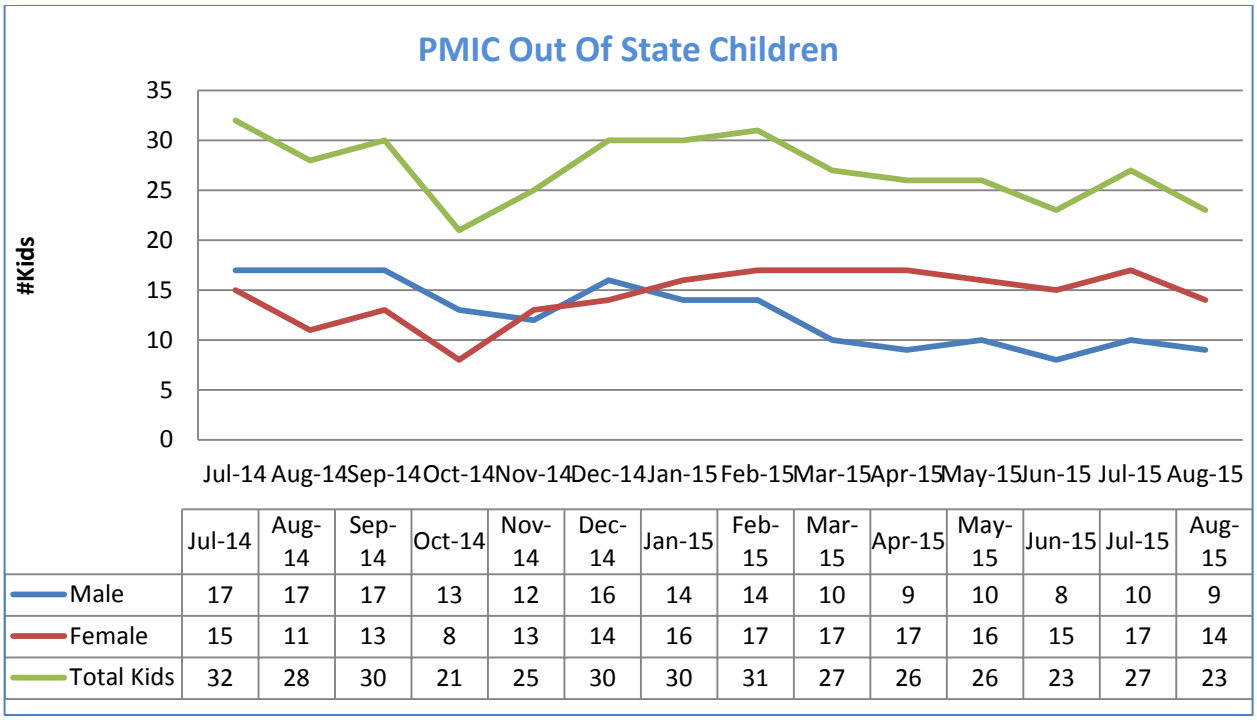
The transition of Psychiatric Medical Institutions for Children (PMIC) into the Iowa Plan occurred on July 1, 2012, without substantive changes as recommended by the PMIC Transition Committee. As a result, some PMICs have increased their ability to provide flexible services while retaining the ability for longer term residential capacity for children with high end mental health needs. As part of the Iowa Plan, PMICs have been able to include more services and discussion among clinical professionals in determining how to best meet the needs of a child.

One of the goals of the transition to the Iowa Plan was to develop specialized programs for children with high acuity requirements whose needs were not met with the previous system. Since July 2012, the partnership with the PMIC providers has evolved to include practical discussions that are intended to put into place the services and supports that best support children to remain in state.

From the time period of July 1, 2014-June 30, 2015, Magellan Behavioral Care of Iowa (Magellan) hosted 1,663 joint treatment planning conference (JTPCs) calls, and many were a result of collaborating with families and improving discharge planning for their children from PMICs. Joint Treatment Planning Conferences, a component of ICM, is used to define case-specific treatment team roles and responsibilities, develop treatment plans, build consensus among all involved parties, and to coordinate funding for services. Typically, members of a member-specific JTPC team include the member, the member's family or representative, DHS/Juvenile Court Services staff, Magellan staff (generally an Intensive Care Manager), other payers, and providers. If a child is enrolled in the Integrated Health Home Initiative, the JTPCs also include the care coordinator with the Integrated Health Home provider that is involved with the care of the child.

II. Children Served by PMIC Providers

From July 1, 2014 – June 30, 2015, a total of 1,012 Iowa Plan members with a primary mental health diagnosis have been served by PMIC providers. This was a slight increase from the same time period the year prior, where 1,010 members were served. The number of children who have received services by a PMIC provider out of state (OOS) by month are demonstrated in the table below. Children who are served out of state tend to be those who exhibit behaviors that in-state PMIC providers feel they do not have the capability or capacity to serve. Specifically, these scenarios include those who have severe aggression behaviors, those who exhibit sexual acting-out behaviors, those who have had multiple placement failures, and those who have Intellectual Disabilities with co-occurring mental health diagnoses. As demonstrated in the graph below, children receiving treatment OOS has decreased slightly since early 2014 as capacity has been built in-state and efforts are made to find appropriate treatment in Iowa for children needing PMIC treatment.



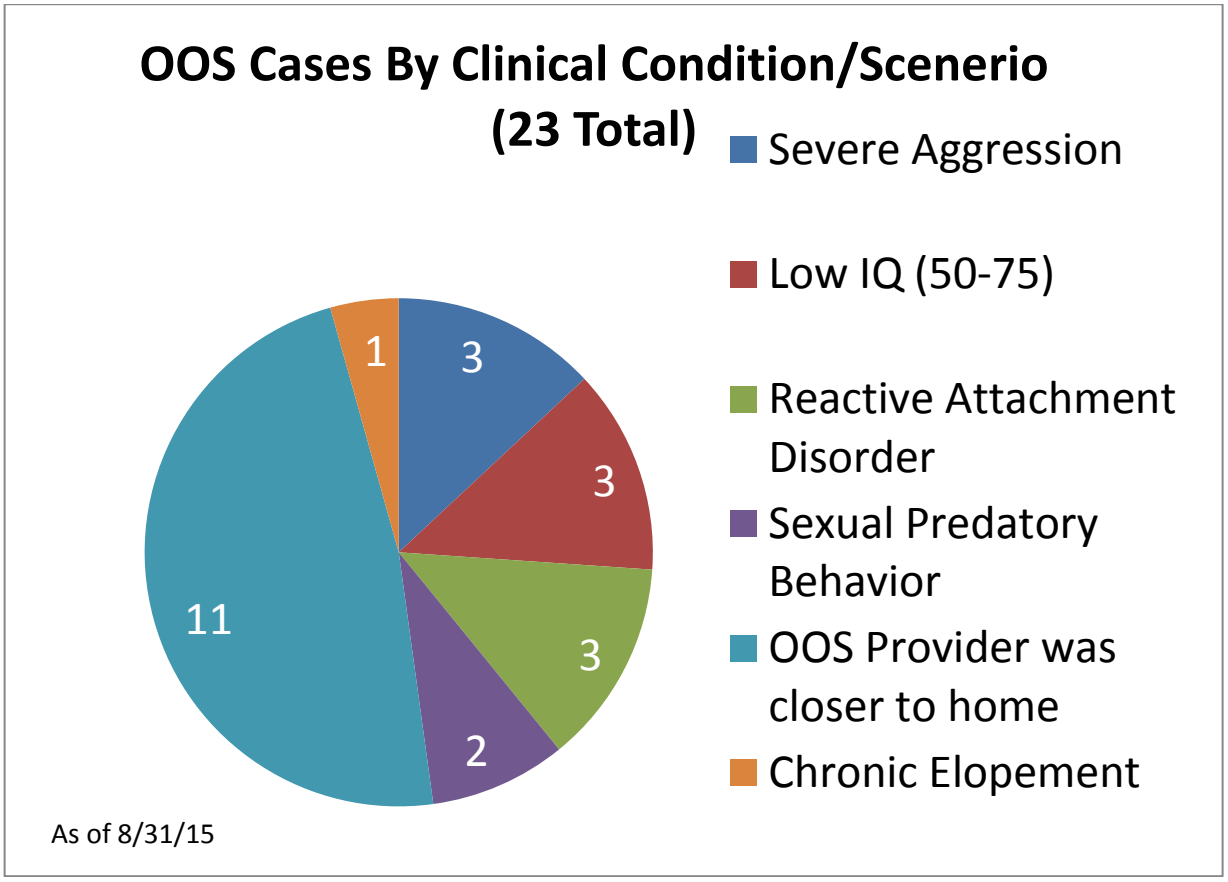
	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15
Male	17	17	17	13	12	16	14	14	10	9	10	8	10	9
Female	15	11	13	8	13	14	16	17	17	17	16	15	17	14
Total Kids	32	28	30	21	25	30	30	31	27	26	26	23	27	23

Case Example:

> In 2011, 15 year-old boy who was seeking PMIC treatment was sent to a PMIC facility in Wisconsin. The boy presented with Autism Spectrum Disorder, Obsessive Compulsive Disorder, Reactive Attachment Disorder, severe aggression to self and others, and other persistent mental health concerns. Because of the intensity of his symptoms, no in-state PMICs felt they could meet his needs. This child came back to an Iowa group home in 2012 and made significant clinical improvements but, once again, he needed PMIC treatment related to his continued and intense aggressions. This child then received treatment at a different out-of-state facility, and a year later was able to return to an Iowa PMIC that has assisted him in engaging with his family. In December 2014 he will turn 18 and plans to live in a community-based setting and enroll in classes at a local community college. In addition to his progress in recovery, he has been enrolled into a local IHH that has been assisting in his plans for transitioning to community living.

Generally, Magellan's case management team is able to find placement in-state for the children who display aggression or self-harm. In instances where all in-state PMIC providers have initially declined to accept a child into their program, Magellan's PMIC supervisor will present these cases to PMIC clinical directors to discuss what services and supports are needed for the child they are discussing to remain in-state with a local PMIC. Through the

work Magellan is doing to enhance these services and supports, there has been willingness by PMICs to consider accepting children into their program that would have historically been placed out of state.



After approaching all PMIC providers, there has been one in-state PMIC provider that has used additional funding and support from Magellan to develop their program to be trauma-informed. Through use of the community reinvestment funding from Magellan, this provider has been able to train staff to more adequately work with these children. In addition, the collaboration and professional input from Magellan has lead the provider to take recommendations for services and supports, specific to each child, which can increase the likelihood of success for that child and his or her family. This provider expressed satisfaction in working with Magellan care managers to gain additional clinical input specific to each child. More importantly, they have made a commitment that when they admit children who display more difficult behaviors they will work with Magellan to dedicate all their resources to working towards a positive outcome in order to keep children from leaving the State. Resources utilized by the provider include:

- Completing trauma-informed assessments.
- Having specialized and individualized treatment planning based on the assessment.
- Offering intensive trauma-informed training.
- Adding additional staff to meet the needs of these children.

- Working with Magellan to negotiate additional funding based on an individualized clinical plan for this child to assist the provider in making these changes.

In March 2014, another Iowa PMIC provider was able to designate a portion of their PMIC beds to specialize in serving children who have Intellectual Disabilities that co-occur with their mental health diagnoses. This has helped in finding a more appropriate treatment facility for some children and has been a diversion for some children who would have otherwise gone out of state for treatment. In addition, some children who were out-of-state were able to come back to Iowa to this facility in order to start better aligning family and local resources for the child's return to the community. Because this provider is located in state, they are more aware of the local resources that exist and can start connecting the family to those services in their home communities.

In 2013, Magellan implemented an improved process for getting DHS/Juvenile Court Officer (JCO) referrals. Referral packets from DHS and JCOs are now sent to Magellan rather than directly to PMIC admission staff. Once the packet is complete, the clinical information is reviewed by a Magellan care manager within one business day, and if clinical criteria are met it is preauthorized for admission. Completed packets are sent to PMICs for consideration of admission with an expectation that they give Magellan a decision within 10 days of receiving the packet. Since this process began in August 2013, Magellan has processed over 200 applications to improve efficiencies within the referral process. The average length of time from PMIC approval by Magellan to the time a PMIC has been identified for the admission is 6 days. The time for getting a completed packet varied greatly prior to implementing this process. Packets were often missing information and would result in added time spent collecting information and communicating repeatedly with the referral source. Through this improvement in process that Magellan has made, packets returned are completed and any additional information needed is sought out by Magellan immediately. Feedback from JCOs and PMICs has been very positive and these efforts will continue to ensure a more seamless referral process among stakeholders.

The length of time between identifying a PMIC placement and the PMIC admission was 10 days for the timeframe of January 1, 2015 – August 31, 2015. This process also avoids excessive wait times for children who do not meet the clinical criteria for PMIC treatment. Now, when a PMIC gets a packet, Magellan has already approved the stay and the PMIC will only need to contact Magellan at arrival – no additional preauthorization is needed.

III. Discharge Locations and Community-based Services

A critical piece that demonstrates Magellan monitors where children are discharged to following a PMIC placement. One specific measure tracks how many children were discharged to a "desired living arrangement". This is defined as the resident of the parent, adoptive parent, guardian, or for minors in the custody of the DHS as identified in the permanency plan. Categories of "home" include: client home, foster home, and relative/friend home. For the SFY 2015, 75.9% of children were discharged to a desired living arrangement.

Upon discharge, community-based services that are available include any combination of outpatient therapy, medication management, Behavioral Health Intervention Services (BHIS, which often includes an increased number of units), family peer support and systems of care, or Integrated Health Home (IHH) involvement. The documentation of discharge planning among PMICs demonstrated 97.9% of records reviewed as of June 30, 2015. This measure is inclusive of those who were discharged from a PMIC and a discharge plan was documented within 30 days of the admission to the PMIC.

The inclusion of Integrated Health Homes as a component of treatment planning for children in PMICs will increase involvement of resources in the home communities of the children receiving PMIC services. From the onset of PMIC treatment IHHs will be involved with the PMIC and the families, adding a more robust care coordination component to discharge planning and community treatment engagement in the transition from the PMIC level of care to the child's home community. The Family Peer Support Specialist who is part of the IHH will also work closely with the family of the child to support them while the child is receiving treatment and upon the child's return home. In order to support this addition of IHH integration as a component of coordination with PMICs, the PMIC Workgroup has worked to develop workflows between the PMICs and IHHs.

Case Example:

A 15 year-old girl was receiving treatment in a PMIC facility in northwest Iowa after receiving several months of inpatient treatment due to a new diagnosis of schizophrenia. Her family did not feel comfortable taking her home and felt like they needed more supports in place before the PMIC could successfully discharge her. The member was initially enrolled into the IHH in the community where the PMIC was located because the IHH in her home community had not yet launched. By the time the child was ready to discharge to her home, the IHH in her community had launched and the PMIC was able to connect her to IHH and other local resources. The mother was very grateful to the IHH for the support they received. They were able to connect her daughter to adequate outpatient supports and liaison with the school to develop a plan to meet her needs. She is now living at home with supportive services that are able to meet the needs of the entire family.

IV. PMIC Data

Incidence of Readmission to PMICs

In SFY 2015, the readmission rates for PMICs were measured using meaningful timeframes for the PMIC population. The monitoring of readmissions using these parameters is meaningful in terms of efficacy of PMIC treatment, discharge planning, and parental involvement during treatment.

PMIC Discharges from 7/1/14-6/30/15		
90 DAY	Actual	Standard
Ages 0-12	3.8%	2.8%
Ages 13-17	2.4%	2.8%
Overall	**3.0%**	**2.7%**
180 DAY		
Ages 0-12	5.1%	6.8%
Ages 13-17	9.7%	5.1%
Overall	**9.4%**	**5.5%**
365 DAY		
Ages 0-12	5.9%	11.8%
Ages 13-17	11.5%	9.0%
Overall	**9.8%**	**9.8%**

Length of Stay in PMICs

The increased number of children served in PMICs in State Fiscal Year (SFY) 2015 has, in part, been influenced by the decrease in the average length of stay at the PMIC facilities since Magellan's management of PMIC services. In SFY 2015, the average length of stay was 204 days compared to 225 days in SFY 2014. Because of this decrease in the number of days a child received treatment in the PMIC facility over the course of the past three years, more children have been able to be served in the PMIC setting.

PMIC Member/Parent Satisfaction Surveys

In 2012, Magellan developed a satisfaction survey as a result of discussion among the Quality Improvement (QI) directors of PMICs and the QI director of Magellan. With the assistance of Magellan's corporate survey team leadership, the workgroup integrated best practices from across PMICs to develop satisfaction surveys for parents, youth, and children. The process involved distribution of surveys, both paper and electronic, which measured satisfaction of care at an initial measure, care within the first two months, and care at discharge at the end of the PMIC encounter. Many use the results for their accreditation purposes and to drive their own QI initiatives. Key results are shared below.

PMIC Youth Satisfaction (Ages 12-17) Survey Results, May 2015	Initial Survey Results	Discharge Survey Results
Q1. Do you feel safe from harm here?	60.8%	76.5%
Q4. Does staff encourage you to talk about and work on your mental health and problems?	66.7%	80.0%
Q6. Do you feel better able to deal with things that used to be hard for you?	64.7%	78.5%

Functional Outcomes Using the Consumer Health Inventory (CHI)/SF-12

Analysis was done of the Consumer Health Inventory in 2014 that Magellan made available to the PMIC providers and that is administered to children receiving PMIC services. The following information regarding the analysis has been provided by Magellan's healthcare informatics experts to be included in this report.

Youth ages 14 and older in PMIC complete the Consumer Health Inventory (CHI) at admission and every six months. The CHI can be used for functional health outcomes through analysis of the change in emotional health scores, subscores, and even item level response. Magellan's goal was to identify the strength of the functional outcomes of PMIC as well as opportunities for improvement in functional outcomes. Statistically significant and meaningful change was seen in the following areas: Emotional Health, Coping, Social Functioning, Depression, Anxiety, and Thought Disorder. Youth with admission CHI scores more than one standard deviation below the US norm made substantial improvements in PMIC. There were too few youth reporting alcohol and other substance use for analysis. Observations and recommendations are provided for improving reporting and outcomes.

Analysis

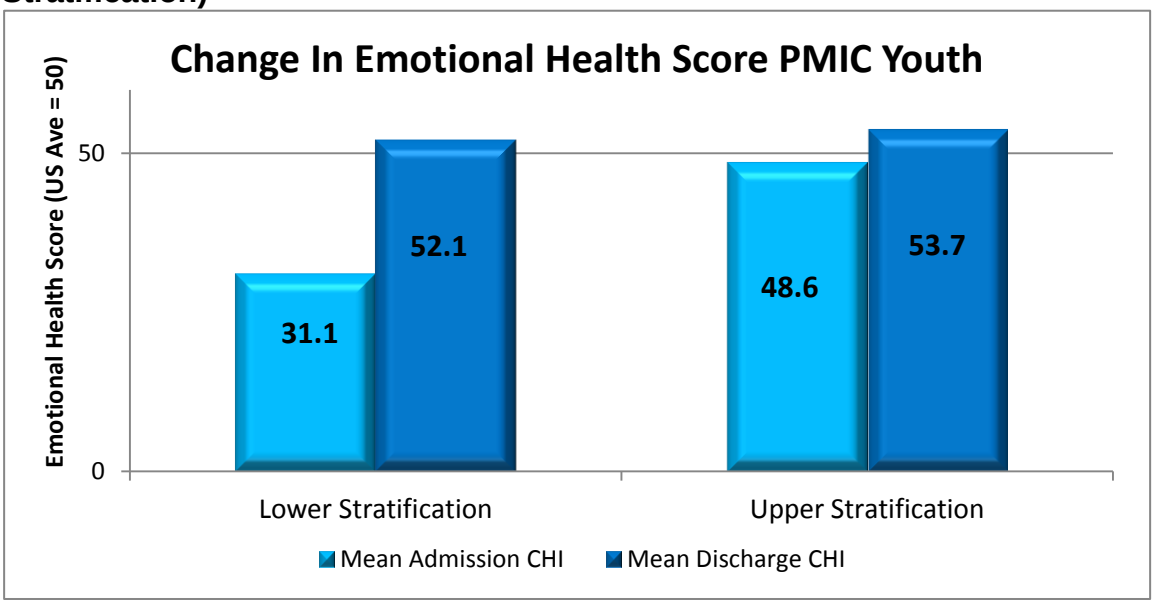
This analysis studied all youths discharged from a PMIC facility between 8/1/2013 and 7/30/2014 who were administered a CHI at admission and upon discharge. The CHI must have been administered within 30 days +/- the admission AND the discharge date according to the rules of CHI administration and to guarantee accurate

assessment of emotional and physical health. However, of the 789 youths discharged within this period, only 42 were given the CHI according to the criteria outlined above (i.e. an initial administered CHI within +/- 30 days from the admission date AND a "discharge" CHI administered within +/- 30 days from the discharge date). [1]

The youth showed statistically significant improvement of 13 points in global emotional health between admission and discharge ($t = 6.91$, $p < .001$). More importantly, the 21 youth who scored below average (<40, or one or more standard deviations below the normed mean of 50) improved an average of 20.98 points with an extremely large effect size ($t = 9.13$, $p < .001$). Youth who scored average or above average (scores between 40 and 100) maintained average/above-average emotional health with statistically significant improvement at a large effect size ($t = 2.93$, $p < .05$). (Table 1) A coping scale was constructed to discover if improvements were found in a youth's ability to bounce back (Q2), formulate plans for the future (Q3), and deal well with daily problems (Q1). This coping scale was determined to be statistically significant ($t = 5.50$, $p < .001$) with a very large effect.

[1]*Another group was created for additional analytic power and generalization who had a first CHI within 6 months of admission and a most recent CHI with 6 months of discharge (Control group N = 42). Significance testing showed that the two groups were not statistically different from one another, offering some proof that the study group is representative of the PMIC population. Additional information on the control group is in Appendix A.*

Change in Emotional Health Score (SF-12) Stratified by US Norm Below Average Score (Lower Stratification) and Average/Above Average Score (Upper Stratification)



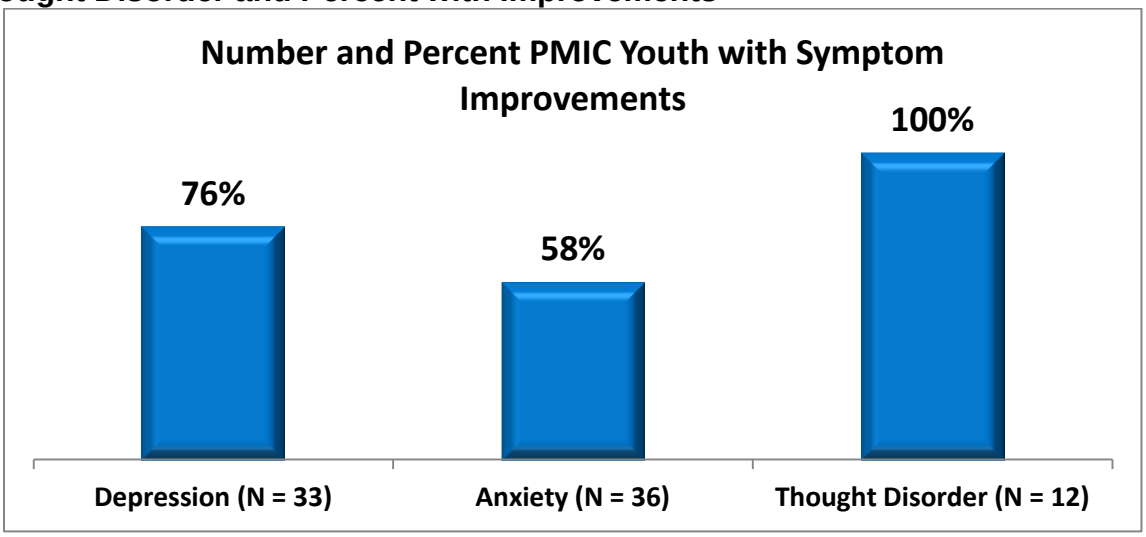
Social Functioning was measured on the 5-point Likert scale: How much of the time has your health been a problem with such things as seeing friends and family… *All the time (1)/Much of the time (2)/Some of the Time (3)/A little of the time (4)/None of the time (5).* Statistically significant improvement in social functioning was seen ($t = 5.19$, $p < .001$) with a very large effect. On admission, the average youth scored at 3.95 and at discharge 4.98 for an average difference of 1.02 points. More meaningfully, at discharge 41 of 42 youth indicated that their health did not interfere with social functioning.

Depression was measured on a 5-point scale: *How much of the time have you felt downhearted and depressed…All the time (1)/Much of the time (2)/Some of the Time (3)/A little of the time (4)/None of the time (5)*. If a youth scored 1 – 4 on the first CHI administered, they were categorized as having symptoms of depression. Thirty-three (of 42) youths had symptoms of depression on admission while only 24 youths reported any depressive symptoms on discharge. Of the 33 youth who reported any depressive symptoms, 25 had improvement in their depression symptoms (e.g., moving from having depressive symptoms most of the time to a little of the time). This result was both statistically significant and meaningful.

Anxiety was measured on a 5-point scale: *How much of the time have you felt anxious and worried…All the time (1)/Much of the time (2)/Some of the Time (3)/A little of the time (4)/None of the time(5*). If a youth scored 1 – 4 on the first CHI administered, they were categorized as having symptoms of anxiety. Thirty-six (of 42) youth had symptoms of anxiety at admission and 21 had improvement in their anxiety symptoms (e.g., moving from having symptoms of anxiety most of the time to a little of the time). This result was both statistically significant and meaningful.

Thought disorder was measured on a 5-point scale: How much of the time have you seen or heard things that other people don't…All the time (1)/Much of the time (2)/Some of the Time (3)/A little of the time (4)/None of the time(5). If a youth scored 1 – 4 on the first CHI administered, they were categorized as having symptoms of thought disorder. Twelve (of 42) youth had symptoms of thought disorder and improved from experiencing symptoms of thought disorder a little of the time (3.75) to none of the time (4.83). This result was both statistically significant and meaningful.

Number of Youth (out of 42) with Symptoms of Depression, Anxiety, and Thought Disorder and Percent with Improvements



Substance abuse was unable to be sufficiently studied because only one youth reported using alcohol and two youth used other substances.

Observations and Recommendations Based on Outcomes Analysis:

1. The overall strength of the PMIC functional outcomes is on youth who are Below 40 on the Emotional Health Score (1+ Standard Deviation below US Norm). These youth average almost 2 SD below the US Norm, yet are able to gain back those functional losses. There remain symptoms of depression, anxiety, and even thought disorder, yet the full view of functional outcomes demonstrates that youth report coping much better with those behavioral symptoms and better able to function socially. Youth who are functioning within the normative range make modest gains. No study of the duration of the time to attain these outcomes between the youth at admission with lower or average scores could be completed due to the small number of youth in the sample; this could be a follow-up analysis.
2. Although demonstrating strong outcomes for these youth, the study should be viewed as preliminary outcomes as only 5% of the youth in PMIC had both an admission and discharge CHI +/- 30 days of both events. The comparison group which used a generous 6 months of admission and discharge only captured another 5% of the youth. For the CHI to be used purposefully for PMIC outcomes, completion at admission and discharge would be recommended as well as possibly mid-residential to check on youth progress. PMICs could then use the CHI Provider Web Reports to better assess their own youth population and identify outlier scores for specific treatment planning and better identification of youth success.

PMIC Expenditures

Analysis of the cost associated with mental health PMIC service included a total cost in SFY 2015 of $33.56 million with a total number of 1,012 unique youth served in that time period; a decrease from the fiscal year prior.

SFY	# of youth served	Total Cost
2009	854	$18.27 million
2010	946	$27.64 million
2011	862	$25.79 million
2013	987	$31.79 million
2014	1,010	$34.24 million
2015	1,012	$33.56 million

*SFY2012 data available to Magellan was incomplete for determining total cost for PMIC

This was compared to years prior to inclusion into the Iowa Plan as demonstrated in the table above. The increase in total cost of care for SFY was anticipated as no changes were recommended at the time of the PMIC transition to Magellan. These providers had been cost-based and were receiving rate increases annually. Over the course of SFY 2014, providers shifted off of cost-based reporting depending on when their organization's fiscal years ended.

V. PMIC Workgroup Committee

The PMIC Transition Committee was required to meet through 2013 as mandated by Iowa Senate File 525. The committee opted to continue meeting on a quarterly basis throughout 2015. Committee membership includes all PMIC providers, Magellan staff, DHS staff, and a representative from the Coalition for Families and Children in Iowa. Agenda items have included: PMIC data, the DHS/JCO referral process changes, satisfaction survey results and analysis, PMIC and IHH involvement and process workflows, and critical incident reporting. As the needs of the children receiving PMIC services continue to change, there is great benefit in the continuation of this group meeting. It serves as a way to identify gaps in services and provide support to the PMIC providers as they provide clinical treatment to the State's children with some of the most challenging needs.

VI. Recommendations

With the Medicaid transition to the IA Health Link managed care program, PMICs will continue to be served in a managed care environment. Combining the PMIC services under the same umbrella as their physical health, pharmaceutical, and long term care supports will greatly enhance the ability to provide comprehensive coverage to children with a seamless continuity of care. PMICs will continue to be monitored closely to ensure comprehensive coverage and high quality services.

The work to identify gaps in effective community-based services continues for the children and their families seeking treatment. With the inclusion of the Integrated Health Home Initiative and Iowa Health Link, the IHHs can provide the continuity of services for families when they return to their home communities and will play a critical role in identifying these gaps as the State moves forward.

Additionally, in order to better augment the care coordination for children receiving PMIC services, there is a need for enhanced parental, family, or guardian involvement during the child's treatment. Research has demonstrated that outcomes for children improve when parents are involved from admission to discharge while a child resides in residential facilities.

Along with PMIC providers, Magellan has made important gains in improving clinical services for children in PMIC settings. There is now a concerted effort to keep children in Iowa to meet their clinical needs and receive treatment. Through the work with other PMIC providers, there are now more options to receive that treatment in-state. If children are placed out-of-state for treatment, there are more options for bringing them back sooner than what has historically been available. While there continues to be gains to be made, the inclusion of PMIC services with the Iowa Health Link is a step in the right direction for children and families.

Appendix A Comparison (Control) Group

Another group was created for additional analytic power and generalization who had a first CHI within 6 months of admission and a most recent CHI with 6 months of discharge (Control group N = 42). The Study and the Control group both having 42 youth was coincidence. Significance testing showed that the two groups were not statistically different from one another, offering some proof that the study group is representative of the PMIC population. On the other hand, analysis of the outcomes is substantially different, offering some proof that PMIC outcomes are the result of intervention.

Emotional Health: The control group showed improvement in emotional health, but this improvement was not statistically significant except in the below average group (improvement of 16.37 points with a very large effect size ($t = 5.38$, $p < .001$).

Coping: Coping showed more modest statistically significant improvement ($p<0.05$) and had a moderate effect.

Social Functioning: Social functioning did not show statistically significant improvement with a change in functioning from 4.33 to 4.60, only 0.27 points.

Depression: 36 (of 42) youths had symptoms of depression and experienced some improvement which was not statistically significant.

Anxiety: 40 (of 42) youths had symptoms of anxiety. The youths in group B did not show statistically significant change, but scores remained stable in the some of the time category.

Thought Disorder: 10 (of 42) youths had symptoms of thought disorder. The Control group had even more impressive results as youths moved from having symptoms some of the time (3.30) to none of the time (4.8). These results were also statistically significant and meaningful.

Alcohol and Substance Use: 2 youth reported using alcohol and 2 youth reported using other substances. Substance abuse was unable to be sufficiently studied.